

XIV.

DESCRIPTION OF NEW AUSTRALIAN PLANTS
CHIEFLY FROM THE COLONY OF VIC-
TORIA.

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CRUCIFERÆ.

1. *Cardamine eustylis*.

Dwarf, glabrous or somewhat downy; root creeping; stem thin, upwards naked; leaves petiolate, pinnatisected; segments five to seven, ovate or oblong, lobulate or with a few teeth, the terminal one the largest, the inferior ones narrowed into the base; pedicels at length remote, spreading; petals shorter than the calyx; style longer than the diameter of the spreading silique.

On moist sandy places on the Murray River in South Australia.

Not unlike *C. sarmentosa*.

2. *Sisymbrium trisectum*.

(Sect. *Arabidopsis*.)

Suffruticose, glabrous, erect; leaves glaucous, divided into three linear-filiform segments; pedicels thread-like, three or

four times shorter than the silique, slightly spreading; style very short or wanting; stigma dilated.

In the desert on the Murray River, on Spencer's and St. Vincent's Gulf, and near Lake Torrens.

Besides this and the following species, the genus contains two others already known from Australia, namely *S. filifolium* and *S. nasturtioides*, both referred formerly (Linnean, xxv. p. 368) to *Erysimum*.

MALVACEÆ.

Greevesia.

Calyx closed, at full maturity of the fruit expanding into five segments, surrounded by five shorter lanceolate spreading bracteoles. Petals five, much shorter than the calyx, twisted, never expanded, adnate to the tube of the stamens, and concealed by the calyx. Anthers five, ovate-kidneyshaped, one-celled. Pollen-grains oblique ovate-spherical, echinulate. Styles ten, dilated into convex at length penicillate stigmas. Carpidia five, perfectly free, net-veined, indehiscent, one-seeded, oblique ovate, slightly keeled. Seeds kidney-shaped, smooth, filling the cell.

This highly remarkable genus, which has been dedicated to Dr. Aug. Greeves, one of our warmest supporters of science, is as well from Pavonia, to which it ranks next, as from all other genera of this order, well distinguished by its extraordinary character of covering with its perfectly connate sepals the little twisted corolla, which therefore does not see daylight until shrivelled up long after fecundation, when at length the calyx unfolds to eject the ripe carpels.

3. *Greevesia cleisocalyx*.

Discovered in eastern tropical Australia during Dr. Leichhardt's exploring expedition by Mr. D. Bunce, and now cultivated in the Botanic Garden of Melbourne.

A small shrub, with oblong- or ovate-cordate crenate leaves, which are underneath covered with a grey toment. Peduncles axillary, solitary. Petals ovate-oblong, red.

Howittia.

Calyx five-cleft, without an involucre, shorter than the petals. Stamens numerous, all separately emerging from the tube. Anthers kidney-shaped, one-celled. Grains of the pollen globose, scabrous. Styles three, connate into one. Stigma club-shaped, three-lobed. Capsule sessile, depressed, with three valves and three cells; valves bearing the septum in the middle; cells two-seeded, including at the top a slight quantity of woolly hair. Axis of the capsule persistent, thread-like. Seeds obovate—three-sided.

This new malvaceous genus, which bears, in acknowledgement of his devotion to botany, Dr. Godfrey Howitt's name, is nearest related to *Lagunaea*, less to *Fugosia*.

4. *Howittia trilocularis.*

On bushy declivities around Lake King.

A flexil shrub, attaining the height of twenty feet. Leaves ovate or oblong—lanceolate, with a heart-shaped base, above scabrous, beneath tomentose. Stipules never distinctly developed. Peduncles axillary, solitary, filiform, single-flowered. Petals obovate purplish.

DIOSMÆ.

5. *Asterolasia chorilenoides.*

Much branched; leaves very spreading, sessile, coriaceous, with revolute margin, terete-linear, above smooth, beneath velutinous; flowers small, capitate, furnished with bracteoles; sepals glabrous, of equal length with the carpels; petals wanting; filaments below the middle villose; style glabrous; stigma minute, undivided; seeds opaque, tuberculate.

On dry coast-ridges near Lake Hamilton in South Australia. C. Wilhelmi.

Anomalous in producing bracts and a simple stigma, yet not to be separated from the two other species; offering thus a close approach of this genus to *Chorilæna*.

SAPINDACEÆ.

6. *Dodonæa hexandra*.

Erect, glandular—scabrous; branchlets thin, indistinctly angulate; leaves sessile, filiform-linear, acutish, not furrowed, on the margin revolute; flowers dioecious, hexandrous, axillary and terminal, all solitary on short pedicels, nearly drooping; sepals three, ovate—lanceolate, acuminate, filaments very short; connective of the anthers puberulous at the top; capsules depressed, with three rarely four valves, which are wingless, but bear an appendage on the back; seeds shining.

In the scrub near Port Lincoln, on limestone. C. Wilhelmi. Undoubtedly similar to *D. pinifolia*.

POLYGALEÆ.

7. *Polygala veronicaea*.

(*Sect. Polygalon.*)

Stems suffruticose at the base, erect or diffused, nearly terete, hardly branched, as well as the peduncles and pedicels puberulous; leaves alternate, close to each other, soon smooth, the lower ones ovate or round, the upper ones lanceolate, acute, apiculate, net-veined, on very short petioles and with slightly recurved margin; racemes lateral and terminal, few-flowered; middle bracteole ovate-lanceolate, longer than the lateral ones, but much shorter than the pedicel; exterior sepals spreading, the interior ones ovate, contracted into a cuneate base, blunt, apiculate, glabrous, veined, of the length of the crested keel and likewise of the roundish-obcordate broad-winged glabrous capsule; ovary tapering into a very short stalk; seeds ovate, sparingly hairy, of twice the length of the strophiole.

In grassy or gravelly places from the King River to the Goulburn River.

Principally allied to *P. conücarpa* and *P. Loureirii*, both from the Chinese Empire.

It is remarkable, although already forty years ago the occurrence of the genus *Polygala*, within and beyond the tropics of Australia, was noticed by R. Brown, in the appendix to Flinders' Voyage, p. 544, that until now, no Australian species should have been described.

LEGUMINOSÆ.

8. *Daviesia egena*.

Tall, much branched, leafless; branches terete, erect, furrowed, unarmed; racemes very long, terminal; pedicels thickly, solitary or twin, shorter than the calyx, furnished at the top with two bracteoles; which are rounded, persistent, ciliolate, connate at the base and larger than the lower ones; calyx indistinctly angulate, with acute teeth, the lowest of them longest; keel perfectly blunt, hardly longer than the wings; stamens all connate; ovary subsessile and style smooth; pods oblique oblong-ovate, slightly convex, with a very short beak; seeds equally brown, with a papillous irregular lobed strophiole.

In the barren bushy plains along Spencer's Gulf, Lake Torrens, the Flinders' Ranges, and Murray River.

The bibracteolate calyx distinguishes this strange plant from the rest of the *Daviesia* species.

9. *Eutaxia sparsifolia*.

Branchlets spreading, as well as the calyces silky; leaves dispersed, short-stalked, semiterete-trigonous, channelled, glabrous, acutish, slightly recurved, spreading, at last deflexed; flowers a few together on the top of the branchlets, stalked, without bracteoles; upperlip of the calyx rounded, a little emarginate; teeth of the lower lip deltoid-acuminate; pods turgid.

In the desert scrub towards the mouth of the Murray River.
Found also at Tumbay Bay by Mr. C. Wilhelmi.

10. *Pultenaea fuscata*.

Branchlets hardly spreading; leaves stalked, trigonous linear, channelled by the inflexed margin, acute, mucronulate, the uppermost below the middle long ciliated, the rest smooth; stipules large, concrete, imbricate, setaceous-acuminate, fringed; heads few-flowered; teeth of the calyx and bracteoles setaceous-acuminate, downy; ovary sessile, silky.

Between the Coorong and Murray River, on scrubby localities.

Next to *P. arista*.

11. *Pultenaea canaliculata*.

Branchlets hardly spreading, velvety; leaves oblong-linear, blunt, very short-stalked, channelled, gradually tapering into the base, somewhat silky-velvety; stipules lanceolate or linear-subulate, downy; heads few-flowered; calyces downy, pale, membranous, little longer than the downy linear-setaceous bracteoles; teeth of the upper-lip broader, all setaceous-acuminate; ovary sessile, velvety; pod beaked; seeds somewhat shining.

At Encounter Bay.

Near to *P. mollis*.

12. *Pultenaea densifolia*.

Branchlets divaricate, leaves small, crowded, coriaceous, broad-obovate, or somewhat cuneate, stalked, glabrous, mucronulate, rarely blunt, recurved, above shining, beneath veined, their margin flat, sometimes with a few hairs; stipules imbricate, nearly lanceolate, membranous, pale brown, fringed; flowers axillary, solitary, or in terminal heads; calyces membranous, little longer than the fringed lanceolate mucronulate bracteoles, with the exception of the mar-

gin smooth, their teeth nearly equal, setaceous-acuminate; pods oblique ovate, turgid, slightly silky, sessile.

In the lower Murray desert.

Also near Port Lincoln, according to C. Wilhelmi.

It stands in relation to *P. parviflora*.

13. *Cassia revoluta*.

(Sect. *Chamaesenna*.)

Shrubby; leaves with a channelled rachis, and with six to ten pairs of leaflets, which are lanceolate-linear, pointed, above smooth, beneath and along the revolute margin hairy; a subulate gland between each pair; stipules linear-subulate; bracteoles cymbiform-ovate; peduncles axillary, about as long as the leaves, with from two to four umbellate flowers, together with the branches, pedicels, and rachis pubescent; sepals ovate, glabrous, ciliate, the outer ones broader; one petal much shorter than the rest, nearly round; legume stalked, smooth, slightly arched.

On gravelly, sometimes overflown places, along the Avon, in Gipps' Land.

The systematic position of this *Cassia* will be between *C. Australis* and *Schultesii*.

RHAMNACEÆ.

14. *Trymalium phlebophyllum*.

Branchlets thinly clothed with velvet hair; leaves coriaceous, oval or roundish-ovate, blunt or retuse, above perfectly glabrous and densely net-veined; beneath grey-silky, their margin generally reflexed; stipules lanceolate, acuminate; glomerules disposed in cymes, tomentose; carpels indehiscent.

On the rocky summits of the Elders Ranges and other mountains near Lake Torrens.

Easily recognised by the numerous prominent anastomosing veins of the leaves.

Length of the leaves, quarter to half an inch.

15. *Trymalium bilobatum*.

Branchlets subvelutinous; leaves herbaceous, wedge-shaped, with a dilated bilobed summit, with flat or revolute margin; above glabrous, beneath very thin velvety; their lobes truncate, denticulate, the notch apiculate; stipules lanceolate-subulate; umbels somewhat velvety; crowded at the summit of the branches; style, three-cleft; carpels bursting at the base.

On dry scrubby ridges towards Guichen Bay, and on Spencer's Gulf.

A remarkable plant; in the form of the leaves not dissimilar to *T. bifidum*; in the arrangement of the flowers and fruits, however, resembling *Pomaderris elliptica*.

16. *Trymalium bifidum*.

Branchlets velutino-tomentose; leaves nearly herbaceous, linear-cuneate, forked, with revolute entire margin; above scantily, beneath densely silky-tomentose or above glabrous, the notch not apiculate; stipules almost lanceolate; flowers in dense glomerules, together with the floral leaves pale-grey tomentose; petals entire; style short, undivided.

In the Marble Ranges and on the coast of Spencer's Gulf, at Boston Point. C. Wilhelmi.

It may possibly be a variety of the following species:—

17. *Trymalium halmaturinum*.

Branchlets tomentose; leaves herbaceous, wedge-shaped or ovate-truncate, retuse or bilobed, with flat or recurved margin, above thinly clothed with a partially starry toment, beneath densely tomentose; floral leaves nearly round or ovate, entire or bilobed, above as well as the flowers pale grey tomentose; stipules ovate-lanceolate; flowers in dense glomerules; petals entire; style simple.

On sandy ridges of Kangaroo Island and Encounter Bay.

18. *Trymalium spathulatum*.

Branchlets silky; leaves nearly coriaceous, obovate-spathulate, gradually tapering into the base, almost sessile, with slightly reflexed margin, rounded or truncate at the summit; terminated by a short reflexed point; those of the branches above perfectly glabrous and even, beneath yellowish-grey silky; floral leaves above grey velutinous; stipules lanceolate or linear-subulate; glomerules disposed in a dense panicle; when fruit-bearing clammy; petals entire; style short, undivided; carpels indehiscent.

On the stony ranges near Mount Lofty, in South Australia, and in Kangaroo Island.

Trymalium obovatum (Hook. comp. bot. mag., p. 227) differs from this in distinctly petiolate leaves, which are beneath clothed with a velvet indument, and in larger flowers.

19. *Trymalium subochreatum*.

Branchlets velutinous; leaves nearly coriaceous, oblong-linear, almost blunt, with revolute margin; above scabrous or scantily velutinous; beneath densely velvety; stipules lanceolate-ovate, large; flowers cymose-glomerate, with roundish bracts; calyces, outside grey-velvety, tomentose at the base; petals entire; style simple, short; stigma trilobed.

In the desert-scrub on the Murray River.

Allied to *T. augustifolium* (Reissek in pl. Preiss II., p. 284.)

MYRTACEÆ.

20. *Verticordia Wilhelmii*.

(Sect. *Euverticordia*.)

Quite smooth; leaves crowded, linear-semiterete, at last triquetrous, very short mucronate; corymbs terminal, compound; bracteoles distinct, without ribs, awnless, caducous; tube of the calyx ovate-bell-shaped; lobes of the limb with

from three to five capillar naked simple segments; petals glabrous, perfectly entire; sterile stamens extremely minute, linear-subulate, glabrous, undivided; style exserted, nearly straight, bearded at the extremity.

On limestone ridges at Boston Point. C. Wilhelmi.

This exceedingly pretty little bush forms one of the systematic links between the flora of South and Western Australia. It is accompanied by *Myoporum parvifolium*. *Dodonaea humilis*, *Phyllanthus cygnorum*, *Templetonia retusa*, and other Western Australian plants, but appears to be the only species of this charming and numerous genus which reaches so far east. The simple lobes of the calyx distinguish it at once from all others, except *V. Lehmanni*, *habrantha* and *umbellata*, and these belong to a different section of the genus.

21. *Camphoromyrtus pluriflora*.

Leaves spreading, lanceolate-linear or oblong-lanceolate, acutish, awnless, with flat perfectly entire margin; peduncles generally three-flowered.

On the banks of the Tambo, on the Snowy River, and on several of its tributaries.

22. *Camphoromyrtus crenulata*.

Leaves spreading, ovate or obovate-oblong, blunt, with flat densely and unequally crenulated margin, peduncles one to three-flowered.

On springs and rivulets of the Buffalo Ranges.

23. *Kunzea ericifolia*.

Diffuse or procumbent, pubescent; leaves densely crowded, semiterete, blunt, canaliculate by the inflexed concrete margins, above densely hairy, beneath more or less glabrous; flowers yellow, a few in a head or solitary, axillary, sessile;

bracts and bracteoles persistent, lanceolate, acuminate, ciliated, nearly as long as the pubescent tube of the calyx; petals a little longer than the deltoid-acuminate segments of the calyx, hardly half as long as the stamens; capsule with two or three cells; seeds somewhat reticulate.

In the highest rocky parts of the Australian Alps from Mount Wellington to the Munyang Mountains.

Next to *Kunzea vestista*.

24. *Kunzea pomifera*.

Procumbent; branchlets glabrous or with the calyces velvety; leaves crowded, spreading, coriaceous, imperforated, either cordate or ovate-roundish or lanceolate-ovate, terminated in a recurved short point, glabrous or puberulous, indistinctly five-nerved, veined, with flat scabrous margin; flowers few in a head, terminal, white; bracts roundish; bracteoles broad-ovate, all velvety on the back, shorter than the calyx-tube; filaments long exserted; petals nearly twice as long as the deltoid segments of the calyx; fruit nearly globose somewhat baccate, slightly downy, with three cells; ripe seeds perfectly even, shining.

On the sandy shores and on rocks at St. Vincent's Gulf and Rivoli Bay.

The fleshy fruit is edible and called native apple by the South Australian Colonists.

The plant is in some degree allied to *Kunzea recurva* and *R. Schaueri*.

25. *Kunzea peduncularis*.

Erect, glabrous or rarely downy; leaves crowded, coriaceous, perforated by oil-glands, linear or oblong-lanceolate, acute, one-nerved; flowers white, axillary, solitary, stalked, crowded below the summit of the branches or forming terminal corymbs; bracts downy, lanceolate-linear, deciduous;

petals twice as long as the deltoid segments of the calyx, and half as long as the stamens; capsule with three, four or five cells, immersed in the dry campanulate calyx; ripe seeds hardly shining, reticulate.

At the foot of the Australian Alps, on the banks of rivers and rivulets.

Leaves and flowers similar to those of *K. corifolia*; fruit smaller and nearly campanulate; its stalk sometimes of thrice the length of the calyx.

26. *Leptospermum brevipes*.

Branchlets glabrous, or in a young state somewhat silky; leaves flat, oblong-lanceolate, very short pointed, glabrous, three-nerved, full of oil dots; flowers solitary or twin, axillary or on very short branchlets, terminal; pedicels and calyces grey silky-pubescent, the former as long or longer than the latter; lobes of the calyx pubescent, persistent, lanceolate; capsule depressed, five-celled.

Generally a companion of *Kunzea peduncularis*, to which it bears more resemblance in habit than to any of its congeners, being quite anomalous in producing very conspicuous flower stalks. It ranks nearest to *L. divaricatum*.

HALORAGÆ.

27. *Pelonastes tillaeacea*.

Leaves short, somewhat blunt, as well as the sepals entire; flowers all sessile, the male ones with four stamens; carpels minutely and scantily verrucose.

In wet localities of the Emu Flat, near St. Vincent's Gulf.

28. *Haloragis acutangula*.

(Sect. *Cercodia*.)

Stem perennial, erect, angular, branched; leaves scattered or sometimes opposite, lanceolate-linear, flat, beyond the

middle furnished with linear-subulate remote serraturæ, on the margin denticulate; asperous, on both sides glabrous, but like the stem slightly asperous; floral leaves entire; flowers hermaphrodite, with eight stamens and four stigmas, generally sessile in the axils of the upper leaves, solitary or glomerate, thus forming a long foliate spike; laciniae of the calyx cordate-deltoid, acuminate, of less than half the length of the glabrous petals; fruit large, acute-quadrangular, glabrous and smooth, with four cells, the angles keeled.

On ridges about Port Lincoln. C. Wilhelmi.

It agrees best in its characters with *Hal. racemosa* (Labill. Nov. Holl. I. p. 100, t. 128).

UMBELLIFERÆ.

29. *Hydrocotyle geraniifolia*.

Subglabrous; stems long, diffused, laxe, partially rooting; leaves three to five-parted, the lower ones peltate; segments of all divaricate, ovate or linear-lanceolate, grossly and unequally serrate or lobed, gradually narrowed into the apex, cuneate at the base; stipules membranaceous, fringed; petioles shorter than the threadlike sometimes divided peduncles; umbels many-flowered; pedicels capillary, much longer than the flowers; fruits kidney-shaped; didymous, compressed; mericarps winged at the back, with a rib on each side, and a semicordate excavation at the commissura.

In moist valleys of Mount Disappointment, of the Dandenong Ranges, and thence to the western part of Gipps' Land.

It requires its systematic position near *H. quinqueloba*.

30. *Hydrocotyle pterocarpa*.

Subglabrous; stems creeping; leaves orbicular-reniform, indistinctly five to seven lobed, crenulate-repand; stipules broad, membranaceous, not fringed; petioles longer than the downy solitary peduncle; umbels generally many-flowered,

nearly capitate; fruits didymo-obcordate, much compressed, broad-winged, even; with a rib on each side of the mericarps.

From Mount Disappointment to the Ovens River, on rivulets.

Sometimes viviparous.

Allied both to *H. peduncularis* and *plebeja*.

31. *Dimetopia eriocarpa*.

(Sect. *Eriosciadium*.)

Dwarf, downy; leaflets of the involucre as long as the rays of the fruit-bearing umbel, narrow lanceolate or linear; mericarps equal to each other, on either side rugulose and covered all over with a thick white woolly toment.

On barren stony ridges near Cudnaka, in the neighbourhood of Lake Torrens.

RUBIACAE.

32. *Galium geminifolium*..

(Sect. *Leiaparine*.)

Somewhat scabrous, otherwise smooth; stems long, flaccid, decumbent, with dichotomous branches; leaves remote, linear, acutish, one-nerved, reflexed on the margin, rarely four developed in a whorl, generally two of them wanting or reduced to a teeth-shaped stipule; flowers hermaphrodite, panicled; peduncles straight, divaricate, solitary, twin or several together; pedicels very short; lobes of the small yellowish corolla lanceolate; ovate, much longer than the stamens; fruits glabrous, densely dotted.

Along the margin of the Murray and Avoca.

This insignificant herb may be considered a valuable acquisition to the botanical system, inasmuch as it furnishes means of ascertaining the true nature of the stipular leaves in *Stellata*, proving apparently that this tribe cannot be separated by natural characters from the Rubiaceae order.

33. *Diodia reptans*.(Sect. *Eudiodia*.)

Perennial, herbaceous, much branched; stems rooting; leaves ovate, acutish, petiolate, glabrous or covered with short stiff hair, always ciliate; stipular, vagina, truncate, with or without short bristles; flowers axillary and terminal, solitary, on very short peduncles, not opposite to each other; tube of the corolla very thin, much longer than the bidentate limb of the calyx; stamens and style exerted; the latter nearly to base divided, its divisions capillary; fruits ovate, tapering into the base, nearly glabrous, crowned by the twice or three times shorter deltoid acuminate ciliate nearly erect teeth of the calyx.

On mountain pastures, as well as on the plains along the Snowy River.

One of the most southern localities of a tribe of plants which abounds within the tropics. *Nertera depressa* shares its localities.

Its nearest related congener seems to be *Diodia Virginia*.

LORANTHACEÆ.

34. *Loranthus canus*.(Sect. *Dendrophthoe*.)

Squarrose, grey-lepidote; branchlets below terete; leaves alternate, petiolate, long-lanceolate, more or less falcate, nearly blunt, generally three-nerved; indistinctly veined; cymes axillary, with only two branchlets, bearing each three flowers; flowers pentamerous, outward grey-lepidote, the intermediate one sessile, with an oblong bracteole; the lateral ones on a short and thick pedicel with a roundish navicular bracteole; calyx five-toothed, as well as the bracteoles ciliate; anthers linear, affixed with the base; style filiform; berries urceolate-ovate, greyish-yellow, succulent.

Along the Mackenzie Creek at the Grampians, on the Buffalo Creek, and the Upper Ovens, parasitical on *Acacia mollissima*; at either of these localities rare.

I regret not having been able to examine well developed flowers of this plant. The leaves are not unlike those of *L. pendulus* (*L. Miquelii* Lehm) and *L. eucalyptoides*. The fruits offer very decisive marks of distinction amongst the numerous species; thus they are in *L. canus* more succulent, shorter, and with a less contracted border, and not of a greenish-brown colour as *L. pendulus*. In *L. Preissii* the berries are pink, spherical, and of the size of a pea; in *L. Exocarpi* black, large, ovate; in *L. eucalyptoides* oblong, pear-shaped, green, with a yellowish top. All the described species require a careful new disquisition, as they are not only parasites of various plants similar to each other, but also of genera of very different natural orders. Thus *L. eucalyptoides* produces as long as it adheres to eucalypti or casuarinae, or now also to *virgilia capensis*, long falcate leaves, which, when the plant receives its nourishment from *banksia integrifolia* assume an ovate-orbicular shape, and a very fleshy consistence, whilst the flowers become sessile.

On a former occasion, I alluded to the singular circumstance that the genus should be foreign to Tasmania; although it is here not only amply represented, but also reaches the shores of Wilson's Promontory, and exists in New Zealand.

COMPOSITÆ.

35. *Calotis glandulosa*.

(*Sect. Eucalotis.*)

Pubescent from gland-bearing hair; rhizome divided, somewhat woody; stems numerous, procumbent or adscendant, leafless at the summit; leaves obovate or oblong-cuneate, the uppermost sessile, the rest tapering into a petiole, beyond the middle toothed or lancinate; scales of the involucre ovate-

lanceolate, glandulous-pubescent; achenes ovate-cuneate, very strongly compressed, deep brown, glabrous, asperous, with a thin margin; awns four-seven, setaceous, unequal in length, at the apex retro-aculeate, scabrid at the base, alternating with an equal number of oblong or obovate-cuneate scales, which are ciliate at the top.

On dry grassy ridges near the Snowy River and its tributaries, towards Maneroo. The color of the ray is blue, like in *C. cuneifolia*, *lasiocarpa* and *dentex*.

This character is not without importance for distinguishing the various species. Thus produce *C. dilatata*, *anthemoides*, *scapigera*, and *scabiosifolia* whitish radial flowers, *C. microphylla*, *Muellerii*, *multisetia-erinacea* and *lappulacea* yellow ones. Those of *C. (Cheiroloma)*, *hispidula*, *cymbacantha* and *brevisetia* are yet to be observed.

The genus *Cheiroloma* may be referred as a fifth section to this genus.

36. *Chrysocoryne tenella*.

(*Sect. Bisquama.*)

Dwarf; leaves thick, linear, upwards broader; glomerules short, cylindrical, blunt, golden-yellow; heads with two flowers; scales of the involucre two, glabrous, naked or but imperfectly ciliolate; corolla three-toothed, short exserted.

In flats subject to inundations by winter rains, between the Long Lake and the Fountain, on Spencer's Gulf. *C. Wilhelmi*.

An *Oxalis* (*O. obcordata*), which grows conjointly with this plant, offers a similar approach to *O. phyllanthi* from Western Australia, as this *Chrysocoryne* to *C. pusilla*.

RUTIDOSIS.

Candolle.

(*Sect. Blepharopholis.*)

Scales of the involucre, neither wrinkled nor fringed. Flowers heterogamous, a few female ones peripheral, with

a three-toothed corolla. Scales of the pappus numerous, fringed.

37. *Rutidosia leiolepis*.

Stems numerous, dwarf, simple, ascending, tomentose, rising from a woody rhizome; leaves broad-linear, with revolute margin, at last smooth, the radical ones crowded with a woolly clasping petiole; flower-heads terminal, solitary, hemispherical; scales of the involucre in several rows, pale, smooth; the outer ones broad-ovate, blunt; the inner ones lanceolate; achenes oblong-ovate, truncate; scales of the pappus eleven to thirteen, oblong-spathulate.

On rocks along the Snowy River, and near it on the bare mountainous pastures.

The sub-genus established on this plant connects *Rutidochlamys* closely with *Rutidosia*.

STYLIDEEÆ.

38. *Stylidium soboliferum*.

(*Sect. Tolyppangium.*)

Soboles numerous, threadlike; leaves all radical, crowded together in a dense globule, nearly terete, glabrous, bearing a terminal hair; interstinct scales wanting; racemes few-flowered, corymbose or panicled, together with the scape glandulously pilose; calyx five-parted; lip with appendages; faux of the corolla naked.

In sandy stony declivities of the Grampians, the Serra and the Victoria Ranges.

An elegant little plant, quite of the habit of a saxifraga. It is nearest related to *Styl. piliferum*, and in some degree also to *S. saxifragoides* and *S. assimile*.

OLEINEÆ.

39. *Notelæ venosa*.

Arborescent; branchlets nearly terete, glabrous; leaves

large, opaque, ovate or elongate-lanceolate, acuminate, gradually narrowed into the petiole, on both sides perfectly smooth and net-veined, not or indistinctly dotted with entire or imperfectly repand margin; racemes axillary or lateral, when flowering at least three times shorter than the leaves; teeth of the calyx unequal; stigma subsessile, bifid; drupes large ovate.

In woods of the eastern part of Gipps' Land.

It shows affinity as well to *N. laurifolia* from New Zealand, as to *N. reticulata* from eastern sub-tropical Australia.

PROTEACEÆ.

40. *Grevillea Miqueliana*.

(Sect. *Lissostylis*.)

Erect; branches terete; leaves large, sub-coriaceous, petiolate, lanceolate or oblong-ovate, entire, on the margin hardly recurved, above dotted-scabrous; beneath as well as the branches and rachis tomentose; pubescent, penninerved and net-veined; racemes short, dense, many-flowered, pedunculate, drooping with centripetal development; flowers after the anthesis reclinate; calyx four or five times longer than the pedicel, red, externally grey-downy, inside below the middle white-bearded; style exserted, towards the summit puberulous, at last smooth; germen stalked, glabrous; stigma sublateral, ovate, a little umbonate; follicle oblique ovate.

On the crest of the sterile wooded ranges near Mount McMillan, and along the upper valleys of the Avon in Gipps' Land.

This rare and decorous species has been dedicated to the illustrious botanist Miquel, who, as he participates in the labours to elucidate the Australian plants, is so well entitled to this distinction.

SALSOLACEÆ.

41. *Blitum atriplicinum*.(Sect. *Orthosporum*.)

Stems numerous, prostrate, simple, hardly streaked; leaves grey, green on both sides, alternate, petiolate, much spreading, hastate- or ovate-lanceolate, the upper ones narrow-lanceolate, all acute, tapering into the base, glabrous, with evanescent papillæ; flowers densely glomerate; fruit-bearing calyx wingless, not baccate, imperfectly closed; lobes near the base gibbous; seeds hardly keeled with a densely papillose pericarp.

In saline plains on the rivers Murray and Darling, as also towards Lake Torrens.

42. *Anisacantha kentropsidea*.

Diffuse, much branched, all over villose-tomentose; leaves nearly flat, linear, acute; calyx tomentose, short, above the middle aristate; awns two, short, thin, nearly equal.

In the Murray and Darling Desert.

It resembles *Kentropsis diacantha*.

43. *Anisacantha bicuspis*.

Much branched; leaves crowded, trigono-semiterete, acute, glabrous; calyx villose-pubescent, long, below the middle aristate; stamens five; anthers exerted; awns two, somewhat unequal.

In saline plains in the neighbourhood of Lake Torrens.

44. *Anisacantha tricuspis*.

Branches glabrous, streaked; leaves crowded, semiterete, acute, glabrous; calyx short, tomentose at the summit, above the middle aristate; awns three, unequal.

On the subsaline and sandy banks of the Murray River, subject to inundations.

Next to *A. erinacea*.

45. *Anisacantha quinquecupis*.

Branchlets glabrous, streaked, divaricate; leaves glaucous, nearly flat, lanceolate-linear, acute, glabrous; calyx short, villose-tomentose at the summit, above the middle aristate; styles three; awns five, very unequal.

In sandy-loamy plains near the junction of the Darling and Murray River.

Allied to *A. muricata*.

46. *Kochia sedifolia*.

Velvety from a pale grey toment; stem fruticose, erect, with numerous spreading branchlets; leaves short, crowded, alternate, clavate-semiterete, blunt; flowers generally solitary; wings of the calyx nearly glabrous, hardly longer than its velutinous disk, veined, flabellate, nearly all connate, at last red.

On the limestone banks of the Murray and Darling Rivers, and in dry subsaline places towards Spencer's Gulf and Lake Torrens.

It differs from *K. brevifolia* not only in much more spreading growth, but also essentially in its velvet indument and in the partially separated wings.

47. *Kochia oppositifolia*.

Covered with a grey somewhat silky toment; stem dwarf, spreading, much branched; leaves short, opposite, generally crowded, triquetrous, acute, with nearly carinate backs; flowers mostly solitary; wings of the calyx glabrous, hardly longer than the thinly tomentose disk, veined red, orbicular or flabellate-reniform, disjointed.

On various saline places at Spencer's Gulf.

The opposite leaves distinguish it at once from the numerous other species.

ASTELIACEÆ.

48. *Astelia psychrocharis*.(Sect. *Tricella*.)

Root thick; leaves rigid, from a broad base narrow-lanceolate, sharp keeled, on both sides together with the scape silky, their margin nearly flat; female racemes few-flowered, condensed to a conglomerate panicle, which is much shorter than the leaves; calyx persistent, outside silky; capsules baccate, red, ovate, beaked by the style, three-celled; seeds angulate, ovate, shining.

On wet mossy places in the Australian Alps, at sources of the Murray and Snowy Rivers.

Leaves much broader, but not longer than those of the *A. alpina*.

XEROTIDEÆ.

49. *Xerotes juncea*.

Stemless, leaves long, terete or slightly compressed, streaked, with toothless pungent apex, much longer than the simple few-headed scape; flowers of each sex conglomerate-verticillate.

In the Port Lincoln district. C. Wilhelmi.

Much more robust than *X. spartea*, and in some degree also allied to *X. leucocephala* and *typhina*.

JUNCAGINEÆ.

50. *Triglochin nanum*.

Annual, extremely small; root fibrous; leaves narrow-linear, channeled, nearly blunt, shorter than the treadlike somewhat angular scape; fruits on spreading stalks, pyramidal-linear, consisting of three carpels, which are slightly dilated at the base, inside glabrous, on the back very thin keeled, and on both sides narrow margined.

On mossy rocks frequent in South Australia, rarer in Victoria.

Quite of the habit of *T. centrocarpum*.